

### III REMARKS

#### Summary of Applicant's Invention

Applicant's invention relates to a method of displaying, as a map and a series of graphs on a web page, information about visitors to web pages on the Internet, or viewers of streaming video, for the purpose of monitoring, in real-time, the geographical distribution of visitors viewing advertisements in cyberspace.

A server places ads on a public web page accessible to Internet visitors. The ads are placed in accordance with an ad campaign strategy of an advertiser. Data that includes ad impressions, IP addresses of visitors and geographical data including locations of IP addresses of the visitors are supplied to a servlet. The servlet separates the enhanced data into site-specific data and advertiser-specific data. The site-specific data and a site-specific applet are transferred to a private web page accessible to the site. The site-specific applet dynamically plots indicia representing ad impressions for a site included in the site-specific data on a map on the private web page accessible to the site. The advertiser-specific data and an advertiser-specific applet are transferred to a private web page accessible to the advertiser. The advertiser-specific applet dynamically plots indicia representing ad impressions for the advertiser included in the advertiser-specific data on a map on the private web page accessible to the advertiser. A visual characteristic (color, size, intensity etc.) of an indicium is changed in proportion to a number of the Internet visitors from the same geographical location.

#### Claim Rejections -35 USC 101

Claim 1 was rejected because allegedly directed to non-statutory subject. Examiner states that a “a first of said caches having stored therein a per-advertiser data subset, a second of said caches having stored therein a per-site data subset” in claim 1 is “non-functional descriptive material”. Applicant respectfully disagrees.

When evaluating the scope of a claim, every limitation in the claim must be considered. It is inappropriate to dissect a claimed invention into discrete elements and then evaluate the elements

in isolation. Instead, the claim as a whole must be considered. See *Diamond v. Diehr*, 450 U.S. at 188-89, 209 USPQ at 9 ("In determining the eligibility of respondents' claimed process for patent protection under 101, their claims must be considered as a whole. It is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis. This is particularly true in a process claim because a new combination of steps in a process may be patentable even though all the constituents of the combination were well known and in common use before the combination was made.").

Applicant's claims are limited to the use of a particularly claimed combination of elements to receive user-specific data of ad impressions on Internet Web sites and plot indicia of the ad impressions on a map on a private web page. This is a specific apparatus to produce a useful, concrete, and tangible result, i.e. indicia representing ad impressions plotted on a map on a private web page. The map is a "useful, concrete, and tangible result".

In order to simplify the issues and bring this long prosecution to a conclusion, claim 1 has been canceled by this amendment in favor of claim 2, which incorporates the limitations of claim 1. Therefore the claim 1 rejection is resolved.

#### Claim Rejections-35 USC 112

Claims 12, 13 and 16 have been amended to correct Examiner's objections thereto.

#### Claim Rejections-35 USC 103

Claims 1-6 and 8-20 were rejected under 35 USC 103 as unpatentable over Boyd 6,112,238 in view of the Dolinar article and Blake 5,752,264.

#### Boyd-6,112,238

Boyd discloses an Internet-based system, method and storage medium embodying computer-readable code for analyzing traffic data in a distributed computing environment. The distributed computing environment includes a plurality of interconnected systems operatively coupled to a

server, a source of traffic data hits and one or more results tables categorized by an associated data type. Each results table includes a plurality of records. The server is configured to exchange data packets with each interconnected system. Each traffic data hit corresponds to a data packet exchanged between the server and one such interconnected system. Each traffic data hit is collected from the traffic data hits source as access information into one such record in at least one results table according to the data type associated with the one such results table. Each of the records in the results table corresponds to a different type of access information for the data type associated with the results table. The access information collected into the results tables during a time slice is summarized periodically into analysis results. The time slice corresponds to a discrete reporting period. The access information is analyzed from the results tables in the analysis results to form analysis summaries according to the data types associated with the results tables.

#### Dolinar

Dolinar discloses a graphical information system (GIS) in which each record is attached to a location on a map. For example address information is translated into coordinates of latitude and longitude and then plotted as “data points” on a map.

#### Blake-5,752,264

Blake discloses a multi-processor system in which a CPU data fetch must encounter a cache miss at both the CPU's level one cache (L1) and the CPU cluster's level two cache (L2) in order to necessitate a shared main memory bus access. If a CPU needs to modify a data unit, it first looks for the unit in its L1 cache. If the data unit is not among the units stored in the L1 cache, an L1 cache miss occurs and a L2 cache data request is generated. The L2 request is sent to L2 cache which then searches its directory for the requested data. If a L2 cache miss occurs, the L2 cache retrieves the data from system memory via a shared memory bus and then sends the requested data to the CPU that requested it. If the L2 cache is holding the requested data, it simply sends the data to CPU and no shared bus access is required.

### **Summary of Arguments for Patentability**

Boyd discloses a method for analyzing traffic on the Internet. Dolinar discloses a graphical information system (GIS) in which each record is attached to a location on a map. Address information is translated into coordinates of latitude and longitude and then plotted as “data points” on a map. Blake discloses a memory accessing structure in a multi-processor system using two intermediate cache levels, L1 and L2, between the CPU and the main memory.

In contradistinction, applicant's invention relates to a method of displaying, as a map and a series of graphs on a web page, information about visitors to web pages on the Internet, or viewers of streaming video, for the purpose of monitoring, in real-time, the geographical distribution of visitors viewing advertisements in cyberspace.

The references taken alone or combined do not disclose or suggest separating collected data into per site and per advertiser data sets and processing a data subset to display, on a web page, indicia on a map, the indicia being located on the map according to geographical locations of Internet visitors.

Boyd only teaches analyzing data hits to a web site. Applicant's claims require that locations of visitors to a web site on the Internet be plotted on a map.

Dolinar only teaches that data records can be plotted at coordinates on a map. Applicant's claims require that locations of visitors to a web site on the Internet be plotted on a map.

Blake only teaches buffering methods in a multi-processing system and is not related to the Internet because it does not provide servers for accessing the Internet. Applicant's claims require that locations of visitors to a web site on the Internet be plotted on a map.

### **Detailed Argument for Patentability**

**Claim Rejections - 35 USC § 103(a)**

Examiner has rejected claims 1-6 and 8-20 under 35 U.S.C. 103(a) as being obvious over Boyd in view of Dolinar and Blake.

As to the remaining dependent claims, the Examiner is relying not on an additional reference, but on personal knowledge ("official notice") to supply elements of applicant's claims that are not shown or suggested by Boyd, Dolinar or Blake. Applicant respectfully traverses the use of official notice in this instance and requests that the Examiner provide evidence to back up this position in the next Office action or explain why no evidence is required.

Claim 1 has been canceled.

Claim 2 (as amended) is an independent claim and claims 3-6 are dependent thereon.

Claim 8 is an independent claim and claims 9-12 are dependent thereon.

Claim 13 is an independent claim and claims 14-15 are dependent thereon.

Claim 16 is an independent claim and claims 17-20 are dependent thereon.

None of the references disclose or suggest applicant's claimed invention because none disclose or suggest necessary elements of the claimed combination. Applicant's claims 2-6 call for "an ad server and "an advertising display server". The advertising display server collects the data from the ad server and separates the data into two caches, one containing a per-advertiser data subset (data selected from the advertiser's perspective), the other containing a per-site data subset (data selected from the site's perspective). Claims 8-20 are method claims in which the data are separated into two caches, one containing a per-advertiser data subset (data selected from the advertiser's perspective), the other containing a per-site data subset (data selected from the site's perspective). None of the references disclose or suggest separating data into user-specific data; and using the user-specific data with a user-viewpoint applet in order to plot, on a map on a private web page, indicia representing Internet visitor's access to ad impressions.

The Boyd system (Figure 1) employs a single web server (10) that gathers access information about each user by observing and logging the traffic data packets exchanged between the web

server (10) and the user (12). Important facts about the users can be determined directly or inferentially by analyzing the traffic data. Traffic data collected over a period of time yields statistical information, such as the number of users visiting the site each day, what countries, states or cities the users connect from, and the most active day or hour of the week. Boyd does not suggest displaying the data collected on a map on a web page.

Boyd does not have the concept of an information provider and an advertising display server having stored in two caches, data subsets separated from data collected from said ad server and said information provider, a first of said caches having stored therein a per-advertiser data subset, a second of said caches having stored therein a per-site data subset. This structure is what enables the display indicia on a map on a web page, the indicia being located on the map according to geographical locations of Internet visitors.

Boyd only teaches analyzing data hits to a web site. Applicant's claims require that locations of visitors to a web site on the Internet be plotted on a map.

Dolar only teaches that data records can be plotted at coordinates on a map. Applicant's claims require that locations of visitors to a web site on the Internet be plotted on a map.

Blake only teaches buffering methods in a multi-processing system and is not related to the Internet because it does not provide servers for accessing the Internet. Applicant's claims require that locations of visitors to a web site on the Internet be plotted on a map.

The distinguishing language in the claims is as follows:

Claim 2 (as amended) and dependent claims 3-6.

Said advertising display server having stored in two caches, data subsets separated from data collected from said ad server and said information provider, a first of

said caches having stored therein a per-advertiser data subset, a second of said caches having stored therein a per-site data subset.

Claim 8 and dependent claims 9-12:

B. Separating said collected data into two subsets, a per-advertiser data subset, and a per-site data subset;

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D. Selectively feeding said per-site data subset to said site-viewpoint applet and said per-advertiser data subset to said advertiser-viewpoint applet.

Claim 13 and dependent claims 14-15:

A. Receiving user-specific data related to visitors of Internet web sites upon which ads have been placed on a public web page

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B. Plotting indicia representing ad impressions for a site included in said user-specific data on a map on a private web page.

Claim 16 and dependent claims 17-20:

B. Separating said enhanced data into user-specific data; and,

C. Transferring said user-specific data and a user-viewpoint applet to a private web page accessible to said user;

Said user-viewpoint applet capable of plotting indicia representing ad impressions for a site included in said user-specific data on a map on said private web page.

**The Examiner has failed to set forth a *prima facie* case of obviousness for rejections combining references under 35 USC 103(a) (obviousness).**

The Examiner has failed to set forth a *prima facie* case of obviousness. The MPEP at 706.02 (j) sets forth a process by which a rejection under 35 USC 103 is to be sustained wherein, as in the present case, a single reference (Boyd) is modified by combining it with one or more references (Dolinar and Blake)

The MPEP states that to establish a *prima facie* case of obviousness three basic criteria must be met:

Criterion 1 There must be some suggestion or motivation to modify the reference or to combine reference teachings.

Criterion 2 There must be some reasonable expectation of success.

Criterion 3 The references when combined must teach or suggest all the claim limitations.

These three criteria are analyzed below in order to show why the references cannot be properly combined:

#### **Criterion 1**

**There must be some suggestion or motivation to modify the reference or to combine reference teachings.**

There is no suggestion in the references cited to modify the reference or to combine reference teachings. The Examiner states that:

Boyd does not teach the information provider storing the latitude and longitude of a visitor's geographical location.

Dolinar is cited by the Examiner to supply this missing element. Dolinar does not allow advertisers to monitor in real-time, the geographical distribution of visitors viewing advertisements on the Internet.



The Examiner states that:

Boyd also does not teach said advertising display server having stored in two caches, data subsets separated from data collected from said ad server and said information provider. a first of said caches having stored therein a per-advertiser data subset, a second of said caches having stored therein a per-site data subset.

Blake is cited by the Examiner to supply this missing element. Blake only teaches buffering methods in a multi-processing system and is not related to the Internet because it does not provide servers for accessing the Internet Blake does not teach displaying data on a map. Applicant's claims require that locations of visitors to a web site on the Internet be plotted on a map.

Applicant's invention is a method and apparatus of displaying, as a map and a series of graphs on a web page, information about visitors to web pages on the Internet, for the purpose of allowing advertisers to monitor in real-time, the geographical distribution of visitors viewing advertisements on the Internet.

The claims were rejected as being unpatentable over Boyd and Dolinar and Blake. Boyd is the primary reference relied upon, and is the "reference" referred to in criterion 1. Boyd is the reference to be modified.

The Examiner proposes that it would be obvious to modify the applied reference (Boyd) to use the elements of Dolinar and Blake to provide the missing element, as stated by the Examiner.

It would have been obvious to a person of ordinary skill in the art at the time of the applicant's invention to include the use of two caches for storing per advertiser and per site data subsets to enable the quick retrieval of information for the advertiser and the site manager, since they both may desire to view some different and some overlapping data.

The Examiner has failed to point out why the modification that he proposes would be obvious. Applicant's invention is a combination and the crucial suggestion or motivation criterion in determining obviousness must be considered. The Examiner has failed to do this. Neither Boyd nor Dolinar nor Blake contain anything to suggest the desirability of applicant's claimed combination or any motivation to modify the method of Boyd to effectuate a method of displaying, on a web page, information about visitors to web pages on the Internet, for the purpose of monitoring, in real-time, the geographical distribution of visitors viewing advertisements in cyberspace. In order to satisfy this requirement, the Examiner must show that at least one of the references suggests that it is possible or desirable to modify the applied reference to effectuate a method of displaying, on a web page, information about visitors to web pages on the Internet, for the purpose of monitoring, in real-time, the geographical distribution of visitors viewing advertisements in cyberspace.

## **Criterion 2**

### **There must be some reasonable expectation of success.**

There is no reasonable expectation of success in combining the references in the manner that the Examiner suggests.

Boyd discloses a method of analyzing website traffic. Boyd only teaches analyzing data hits to a web site. Applicant's claims require that locations of visitors to a web site on the Internet be plotted on a map.

Dolinar discloses a graphical information system (GIS) in which each record is attached to a location on a map. For example address information is translated into coordinates of latitude and longitude and then plotted as "data points" on a map. Dolinar only teaches that data records can be plotted at coordinates on a map. Applicant's claims require that locations of visitors to a web site on the Internet be plotted on a map.

Blake discloses a hierarchical cache architecture that reduces traffic on a main memory bus. The architecture includes a plurality of level one caches (L1) associated with each processor (CPU). The L1 caches are connected to a level 2 cache (L2), which is connected to a shared memory bus that goes to a main memory. The purpose of this arrangement is to reduce traffic on the main memory bus by fetching data from the L1 cache first if it is there, and if not in L1, going to the L2 cache, thus avoiding a main memory bus access. Blake is concerned with multi-processors and their commonly shared main memory, not with the Internet. Blake has no provision for accessing the Internet. Blake on teaches buffering methods in a multi-processing system and is not related to the Internet because it does not provide servers for accessing the Internet. Applicant's claims require that locations of visitors to a web site on the Internet be plotted on a map.

The technologies are therefore not compatible there is no reasonable expectation of success in combining the references in the manner that the Examiner suggests.

### **Criterion 3**

**The references when combined must teach or suggest all the claim limitations.**

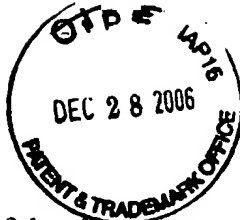
Examiner admits that the combination of Boyd and Dolinar and Blake lacks explicit recitation of some elements of the dependent claims, arguing that the combination of Boyd and Dolinar and Blake implicitly shows the same. This third criterion is not met because the references when combined do not teach or suggest all the claim limitations. The teaching or suggestion must be explicit. The limitations that are not shown are:

Claims 2 (as amended)-6: the ad server and display server limitations.

Claims 8-12 the data separating into two data subsets limitations.

Claims 13-15 the data separating and plotting limitations.

Claims 16-20 the data separating and plotting limitations.



D-1535: SN 09/895,495

In view of the above arguments for patentability, reexamination of claims 2-6 and 8-20 pending in this application and allowance thereof is respectfully requested.

Respectfully submitted,

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